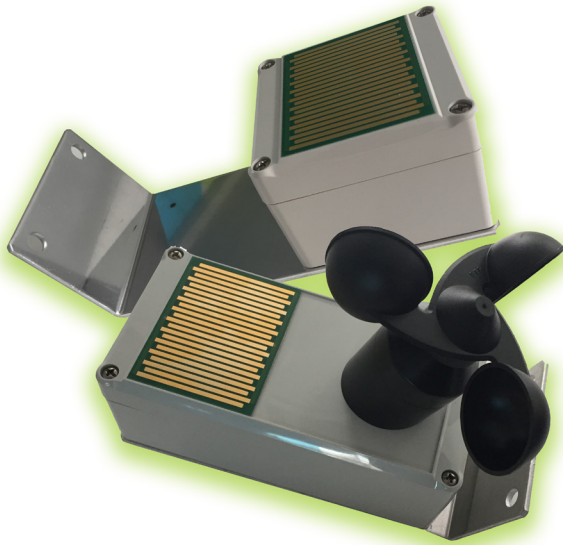


System components

Weather sensors



Daily ventilation systems or smoke control systems with a daily ventilation function will open and close external windows and louvres when pre-set temperatures in the building are reached. To prevent these openings getting damaged in high winds or allowing the ingress of rain or snow in daily ventilation mode, a weather sensor can be installed to automatically close vents during inclement weather conditions.

When the heated sensor plate comes in contact with rain or snow/hail droplets, a short circuit is formed and the sensor triggers, as soon as the rain/snow stops and the heated plate dries out the unit will reset automatically.

The anemometer measures wind speed and triggers when the velocity exceeds the selected conditions. The wind speed set point is adjustable and should be set using the Beaufort scale tables provided on page 2 of this sheet.

Specifications:

EV-WRS wind and rain sensor

Wind range:	1-12 Beaufort Scale
Housing:	ABS plastic RAL 7035 light grey
Ingress rating:	IP65
Dimensions:	190h x 80w x 150d mm
Clamp size:	52mm maximum diameter
Weight:	0.4Kg
Power supply:	20 – 30V DC, 110mA
Contact rating:	30V 1.0A
Connection:	3 Wire
Environment:	-20°C to +85°C
Conformity:	EMC and low voltage directives

EV-RS rain sensor

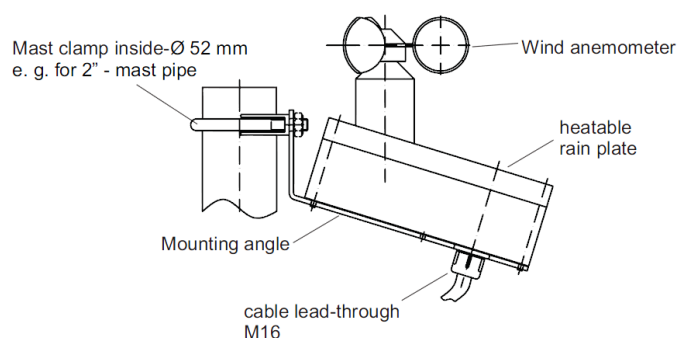
Voltage:	24VDC
Resting current:	70 A
IP rating:	IP65
Operating temperature:	-20 Deg C up to +85 Deg C
Material:	Light grey plastic in RAL 7035
Installation:	Via aluminium mounting angle
Weight:	0.4 Kg
System Connection:	2 Core cable
Environment:	-20°C to +85°C
Conformity:	EMC and low voltage directives

Installation:

Location of the sensor should provide maximum exposure to weather conditions avoiding covered and wind protected or areas of high air turbulence.

It is recommended that the sensor is mounted on a mast extending above the highest point of the roof or building using the mast clamp provided. If a mast installation is not possible remove the mast clamp and fix the unit to the wall using the pre-drilled holes at the rear of the bracket using suitable masonry fixings.

Mounting:



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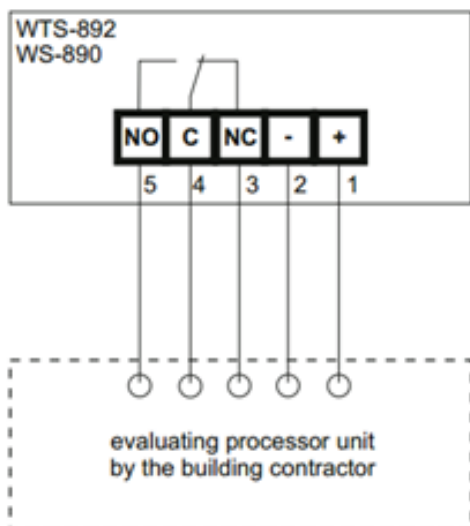
System components

Weather sensors

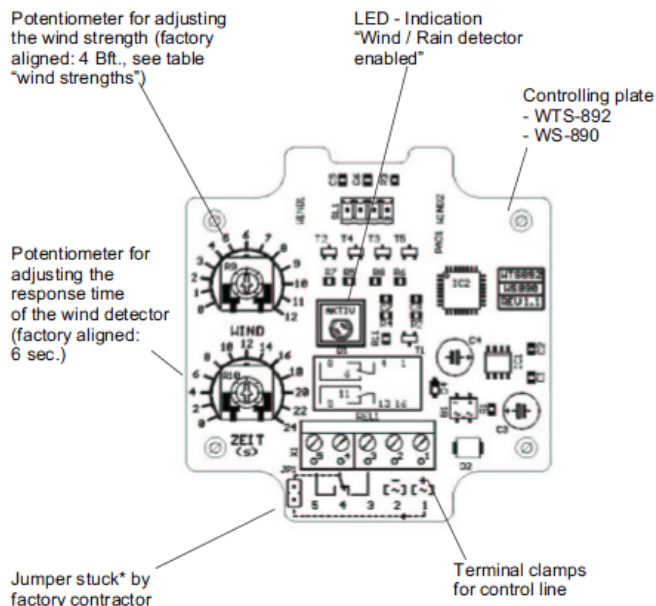


Wiring details:

If the alarm contact is required as a dry contact for an evaluation by the building contractor, the jumper has to be removed!



Configuration:



Upon the detection of rain on the heated plate the weather sensors will send a signal to automatically close vents that are opened for daily ventilation.

When the rain stops and the heated sensor plate dries out the close command will stay enabled for approximately 15 minutes.

Part numbers:

- EV-WRS Wind and rain sensor
- EV-RS Rain sensor

Beaufort Scale:

Scale	Description	Wind speed	
1	Light air	1 - 3 mph	0.3 - 1.5 m/s
2	Light breeze	4 - 7 mph	1.6 - 3.3 m/s
3	Gentle breeze	8 - 12 mph	3.4 - 5.5 m/s
4	Moderate breeze	12 - 18 mph	5.5 - 7.9 m/s
5	Fresh breeze	19 - 24 mph	8.0 - 10.7 m/s
6	Strong breeze	25 - 31 mph	10.8 - 13.8 m/s
7	High wind	32 - 38 mph	13.9 - 17.1 m/s
8	Gale	39 - 46 mph	17.2 - 20.7 m/s
9	Strong gale	47 - 54 mph	20.8 - 24.4 m/s
10	Storm	55 - 63 mph	24.5 - 28.4 m/s
11	Violent storm	64 - 72 mph	28.5 - 32.6 m/s
12	Hurricane	> 72 mph	> 32.7 m/s

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